ABSTRACT OF THE DISCLOSURE

[57] Certain embodiments of the present invention provide a system and method for displaying a set of data with a virtually dissected anatomical structure. In an embodiment, the anatomical structure is a colon and various attributes of the colonic lumen are assigned a color. In an embodiment, a virtual dissection of the colon is created by mapping a three-dimensional data set to a two dimensional data set. A plurality of display index values are computed which correspond to the three-dimensional data set. Various colors are assigned to specific display index values. The three-dimensional display index values are mapped to a two-dimensional set of display index values. As directed by a user, various color cues may be displayed with the virtually dissected lumen to provide color highlights to various aspects of the colon, such as highlighting shape, fluid, or fecal presence.